

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (original) A method of performing a mobile terminal hand-over, comprising:
establishing concurrent communication connections between the mobile terminal and
a plurality of base station transceivers using a plurality of different communication channels,
wherein respective ones of the plurality of base station transceivers are associated with
respective ones of the plurality of different communication channels.
2. (original) The method of Claim 1, wherein the plurality of different
communication channels comprise at least one communication channel associated with a first
communication band of contiguous communication channels and at least one communication
channel associated with a second communication band of contiguous communication
channels.
3. (original) The method of Claim 2, wherein the first communication band of
contiguous communication channels comprises a code division multiple access (CDMA) 800
MHz communication band, and the second communication band of contiguous
communication channels comprises a CDMA 1900 MHz communication band.
4. (original) The method of Claim 1, wherein the plurality of different
communication channels is associated with a communication band of contiguous
communication channels.
5. (original) The method of Claim 4, wherein establishing concurrent
communication connections between the mobile terminal and the plurality of base station
transceivers using the plurality of different communication channels comprises:
sampling the communication band of contiguous communication channels at the
mobile terminal to detect a plurality of signals received from the plurality of base station

transceivers, wherein respective ones of the plurality of received signals are associated with respective ones of the plurality of base station transceivers; and

concurrently demodulating the detected plurality of signals received from the plurality of base station transceivers.

6. (original) The method of Claim 5, further comprising:

a1 filtering signals received by the mobile terminal using a bandpass filter that passes frequencies corresponding to the communication band of contiguous communication channels before sampling the communication band of contiguous communication channels at the mobile terminal to detect the plurality of signals received from the plurality of base station transceivers.

7. (original) The method of Claim 4, wherein establishing concurrent communication connections between the mobile terminal and the plurality of base station transceivers using the plurality of different communication channels comprises:

filtering signals received by the mobile terminal using a bandpass filter that passes frequencies corresponding to the communication band of contiguous communication channels;

stepping down signals received by the mobile terminal and passed by the bandpass filter from frequencies corresponding to the communication band of contiguous communication channels to a band of intermediate frequencies;

sampling the band of intermediate frequencies at the mobile terminal to detect a plurality of signals received from the plurality of base station transceivers, wherein respective ones of the plurality of received signals are associated with respective ones of the plurality of base station transceivers; and

concurrently demodulating the detected plurality of signals received from the plurality of base station transceivers.

8. (original) The method of Claim 1, wherein the mobile terminal is associated with an original one of the plurality of base station transceivers, the method further comprising:

selecting one of the plurality of base station transceivers other than the one of the plurality of base station transceivers with which the mobile terminal is associated;

creating a new association between the mobile terminal and the selected one of the plurality of base station transceivers; then

destroying the association between the mobile terminal and the original one of the plurality of base station transceivers.

9. (original) The method of Claim 1, wherein establishing concurrent communication connections between the mobile terminal and the plurality of base station transceivers using the plurality of different communication channels comprises:

concurrently demodulating at the mobile terminal a plurality of signals received from the plurality of base station transceivers, wherein respective ones of the plurality of received signals are associated with respective ones of the plurality of base station transceivers; and

concurrently transmitting a plurality of signals from the mobile terminal to the plurality of base station transceivers, wherein respective ones of the transmitted signals are associated with respective ones of the plurality of base station transceivers.

10. (original) The method of Claim 9, wherein concurrently demodulating at the mobile terminal the plurality of signals received from the plurality of base station transceivers comprises:

concurrently stepping down respective ones of the plurality of signals received from the plurality of base station transceivers from a plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels, to a baseband frequency; and

wherein concurrently transmitting the plurality of signals from the mobile terminal to the plurality of base station transceivers comprises:

concurrently stepping up respective ones of a plurality of information signals from the baseband frequency to the plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels.

11. (original) The method of Claim 10, wherein concurrently stepping down respective ones of the plurality of signals received from the plurality of base station transceivers from the plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels, to the baseband frequency comprises:

91 concurrently stepping down respective ones of the plurality of signals received from the plurality of base station transceivers from the plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels, to an intermediate frequency; and

concurrently stepping down respective ones of the plurality of signals received from the plurality of base station transceivers from the intermediate frequency to the baseband frequency.

12. (original) The method of Claim 10, wherein concurrently stepping up respective ones of the plurality of information signals from the baseband frequency to the plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels, comprises:

concurrently stepping up respective ones of the plurality of information signals from the baseband frequency to an intermediate frequency; and

concurrently stepping up respective ones of the plurality of information signals from the intermediate frequency to the plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels.

13. - 35. (canceled)

36. A system for performing a mobile terminal hand-over, comprising:

means for establishing concurrent communication connections between the mobile terminal and a plurality of base station transceivers using a plurality of different communication channels, wherein respective ones of the plurality of base station transceivers are associated with respective ones of the plurality of different communication channels.

37. The system of Claim 36, wherein the plurality of different communication channels comprise at least one communication channel associated with a first communication band of contiguous communication channels and at least one communication channel associated with a second communication band of contiguous communication channels.

38. The system of Claim 37, wherein the first communication band of contiguous communication channels comprises a code division multiple access (CDMA) 800 MHz communication band, and the second communication band of contiguous communication channels comprises a CDMA 1900 MHz communication band.

39. The system of Claim 36, wherein the plurality of different communication channels is associated with a communication band of contiguous communication channels.

40. The system of Claim 39, wherein the means for establishing concurrent communication connections between the mobile terminal and the plurality of base station transceivers using the plurality of different communication channels comprises:

means for sampling the communication band of contiguous communication channels at the mobile terminal to detect a plurality of signals received from the plurality of base station transceivers, wherein respective ones of the plurality of received signals are associated with respective ones of the plurality of base station transceivers; and

means for concurrently demodulating the detected plurality of signals received from the plurality of base station transceivers.

41. The system of Claim 40, further comprising:

means for filtering signals received by the mobile terminal using a bandpass filter that passes frequencies corresponding to the communication band of contiguous communication channels, the means for sampling the communication band of contiguous communication channels at the mobile terminal to detect the plurality of signals received from the plurality of base station transceivers being responsive to the means for filtering signals received by the mobile terminal using the bandpass filter that passes frequencies corresponding to the communication band of contiguous communication channels.

a1 42. The system of Claim 39, wherein the means for establishing concurrent communication connections between the mobile terminal and the plurality of base station transceivers using the plurality of different communication channels comprises:

means for filtering signals received by the mobile terminal using a bandpass filter that passes frequencies corresponding to the communication band of contiguous communication channels;

means for stepping down signals received by the mobile terminal and passed by the bandpass filter from frequencies corresponding to the communication band of contiguous communication channels to a band of intermediate frequencies;

means for sampling the band of intermediate frequencies at the mobile terminal to detect a plurality of signals received from the plurality of base station transceivers, wherein respective ones of the plurality of received signals are associated with respective ones of the plurality of base station transceivers; and

means for concurrently demodulating the detected plurality of signals received from the plurality of base station transceivers.

43. The system of Claim 36, wherein the mobile terminal is associated with an original one of the plurality of base station transceivers, the system further comprising:

means for selecting one of the plurality of base station transceivers other than the one of the plurality of base station transceivers with which the mobile terminal is associated;

means for creating a new association between the mobile terminal and the selected one of the plurality of base station transceivers; and

means for destroying the association between the mobile terminal and the original one of the plurality of base station transceivers responsive to the means for creating the new association between the mobile terminal and the selected one of the plurality of base station transceivers.

44. The system of Claim 36, wherein the means for establishing concurrent communication connections between the mobile terminal and the plurality of base station transceivers using the plurality of different communication channels comprises:

91 means for concurrently demodulating at the mobile terminal a plurality of signals received from the plurality of base station transceivers, wherein respective ones of the plurality of received signals are associated with respective ones of the plurality of base station transceivers; and

means for concurrently transmitting a plurality of signals from the mobile terminal to the plurality of base station transceivers, wherein respective ones of the transmitted signals are associated with respective ones of the plurality of base station transceivers.

45. The system of Claim 44, wherein the means for concurrently demodulating at the mobile terminal the plurality of signals received from the plurality of base station transceivers comprises:

means for concurrently stepping down respective ones of the plurality of signals received from the plurality of base station transceivers from a plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels, to a baseband frequency; and

wherein the means for concurrently transmitting the plurality of signals from the mobile terminal to the plurality of base station transceivers comprises:

means for concurrently stepping up respective ones of a plurality of information signals from the baseband frequency to the plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels.

46. The system of Claim 45, wherein the means for concurrently stepping down respective ones of the plurality of signals received from the plurality of base station transceivers from the plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels, to the baseband frequency comprises:

means for concurrently stepping down respective ones of the plurality of signals received from the plurality of base station transceivers from the plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels, to an intermediate frequency; and

a) means for concurrently stepping down respective ones of the plurality of signals received from the plurality of base station transceivers from the intermediate frequency to the baseband frequency.

47. The system of Claim 45, wherein the means for concurrently stepping up respective ones of the plurality of information signals from the baseband frequency to the plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels, comprises:

means for concurrently stepping up respective ones of the plurality of information signals from the baseband frequency to an intermediate frequency; and

means for concurrently stepping up respective ones of the plurality of information signals from the intermediate frequency to the plurality of non-baseband frequencies, which respectively correspond to the plurality of different communication channels.
